

WHAT IS CLAIMED IS:

- 1 1. A pesticide composition, said pesticide composition comprising:
2 a pesticidal agent on a solid carrier;
3 a biopolymer; and
4 an effective amount of a plaster of paris to harden said composition, wherein
5 said pesticidal agent maintains certified limits for at least 12 months.
- 1 2. The composition of claim 1, wherein said pesticidal agent is a member
2 selected from the group consisting of an insecticide, an herbicide, a fungicide, and a
3 combination thereof.
- 1 3. The composition of claim 2, wherein said pesticidal agent is an
2 insecticide.
- 1 4. The composition of claim 3, wherein said insecticide is an insect
2 growth regulator (IGR).
- 1 5. The composition of claim 4, wherein said IGR is a member selected
2 from the group consisting of methoprene, hydroprene, kinoprene, fenoxycarb, pyriproxifen,
3 and mixtures thereof.
- 1 6. The composition of claim 5, wherein said insect growth regulator is
2 methoprene.
- 1 7. The composition of claim 1, wherein said solid carrier is selected from
2 the group consisting of silica gel, sand, carbon, and combinations thereof.
- 1 8. The composition of claim 7, wherein said solid carrier is carbon.
- 1 9. The composition of claim 1, wherein said biopolymer is a
2 polysaccharide.
- 1 10. The composition of claim 1, wherein said polysaccharide is a member
2 selected from the group consisting of acacia, agar, alginate, guar, locust bean, tragacanth,
3 xanthan, and combinations thereof.

1 11. The composition of claim 1, wherein said ratio of pesticidal agent to
2 biopolymer is from about 1:1000 to about 1:1 w/w.

1 12. The composition of claim 11, wherein said ratio of pesticidal agent to
2 biopolymer is from about 1:500 to about 1:50 w/w.

1 13. The composition of claim 1, further comprising an antioxidant.

1 14. The composition of claim 13, wherein said antioxidant is selected
2 from the group consisting of Vitamin E, Vitamin A palmitate, ethoxyquin, propyl gallate,
3 butylated hydroanisole (BHA), butylated hydroxytoluene (BHT), and combinations thereof.

1 15. The composition of claim 1, wherein the ratio of pesticide to solid
2 carrier is from about 0.001 to about 30.0 w/w.


1 16. The composition of claim 15, wherein the ratio of pesticide to solid
2 carrier is from about 0.01 to about 10.0 w/w.

1 17. The composition of claim 1, further comprising a surfactant.

1 18. The composition of claim 17, wherein said surfactant is a member
2 selected from the group consisting of a nonionic ethoxylated alcohol and an ethoxylated
3 substituted phenol.

1 19. The composition of claim 1, wherein said composition maintains
2 certified limits for at least 18 months.

1 20. The composition of claim 1, wherein said composition maintains
2 certified limits for at least 24 months.

1 21. A method for making a pesticide composition, said method
2 comprising: 
3 (a) preparing a pesticidal agent on a solid carrier;
4 (b) premixing water, a surfactant, and a biopolymer to form an aqueous
5 premix;
6 (c) dispersing said pesticidal agent on a solid carrier with said aqueous premix
7 to form a dispersed mixture;

8 (d) adding plaster of paris to said dispersed mixture to form a slurry; and

9 (e) molding said slurry to form said pesticide composition.

1 22. The method of claim 21, wherein said pesticidal agent is a member
2 selected from the group consisting of an insecticide, an herbicide, a fungicide, and a
3 combination thereof.

1 23. The method of claim 22, wherein said pesticidal agent is an insecticide.

1 24. The method of claim 23, wherein said insecticide is an insect growth
2 regulator (IGR).

1 25. The method of claim 24, wherein said IGR is a member selected from
2 the group consisting of methoprene, hydroprene, kinoprene, fenoxycarb, pyriproxifen, and
3 mixtures thereof.

1 26. The method of claim 25, wherein said insect growth regulator is
2 methoprene.

1 27. The method of claim 21, wherein said solid carrier is selected from the
2 group consisting of silica gel, sand, carbon, and combinations thereof.

1 28. The method of claim 27, wherein said solid carrier is carbon.

1 29. The method of claim 21, wherein said biopolymer is a polysaccharide.

1 30. The method of claim 29, wherein said polysaccharide is a member
2 selected from the group consisting of acacia, agar, alginate, guar, locust bean, tragacanth,
3 xanthan, and combinations thereof.

1 31. The method of claim 21, wherein said ratio of pesticidal agent to
2 biopolymer is from about 1:1000 to about 1:1 w/w.

1 32. The method of claim 28, wherein said ratio of pesticidal agent to
2 biopolymer is from about 1:500 to about 1:50 w/w.

1 33. The method of claim 21, wherein said pesticidal agent on a solid
2 support further comprises an antioxidant.

1 **34.** The method of claim **33**, wherein said antioxidant is selected from the
2 group consisting of Vitamin E, Vitamin A palmitate, ethoxyquin, propyl gallate, butylated
3 hydroanisole (BHA), butylated hydroxytoluene (BHT), and combinations thereof.

1 **35.** The method of claim **21**, wherein the ratio of pesticide to solid carrier
2 is from about 0.001 to about 30.0 w/w.

1 **36.** The method of claim **35**, wherein the ratio of pesticide to solid carrier
2 is from about 0.01 w/w to about 10.0 w/w.

1 **37.** The method of claim **21**, wherein said surfactant is a member selected
2 from the group consisting of a nonionic ethoxylated alcohol and an ethoxylated substituted
3 phenol.

1 **38.** The method of claim **21**, further comprising curing said pesticide
2 composition.

1 **39.** A method for controlling a pest, said method comprising: ✓
2 contacting said pest with a pesticide composition comprising:
3 a pesticidal agent on a solid carrier;
4 a biopolymer; and
5 an effective amount of a plaster of paris to harden said composition, wherein
6 said pesticidal agent maintains certified limits for at least 12 months, to thereby control said
7 pest.

1 **40.** The method of claim **39**, wherein said pesticidal agent is a member
2 selected from the group consisting of an insecticide, an herbicide, a fungicide, and a
3 combination thereof.

1 **41.** The method of claim **40**, wherein said pesticidal agent is an insecticide.